SUMMARY NOTES
CALFED BAY-DELTA PROGRAM
LEVEE AND CHANNEL TECHNICAL TEAM MEETING
NOVEMBER 12, 1996

CALFED BAY-DELTA PROGRAM UPDATE

Curt Schmutte of the California Department of Water Resources (DWR) presented a brief update on the CALFED Bay-Delta Program (CALFED). The revised CALFED schedule for the Phase II Programmatic Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is to complete conducting impact analysis between now and June 1997, and produce an administrative draft EIR/EIS in September 1997 and a public draft EIR/EIS in November 1997. By February 1997, the levee and channel technical team should submit information on the levee component of CALFED to CALFED staff for impact evaluation.

The following draft list of issues for the levee and channel component of CALFED was discussed.

- priorities
- acceptable seismic risk
- controlling urbanization
- controlling boat wakes
- level of cost sharing
- Endangered Species Act(s) concerns
- permit streamlining
- U.S. Army Corps of Engineers involvement and cost sharing
- federal funding
- influence of conveyance alternatives on flood control needs

LAND SUBSIDENCE SUBTEAM

The subsidence subteam is working to identify options to stop or reverse subsidence and determine the primary factors that influence subsidence. The options include managing flooding and shallow vegetation , capping, modifying agricultural practices, establishing deepwater areas (i.e., island reservoirs) and managing wetland habitats . The team is working to evaluate where these options should be implemented. It is collecting subsidence information by comparing 1908 and 1978 topographic maps and from results of demonstration projects and site-specific data on depth of peat soils and percent organic matter. There was some discussion on looking at how historical

agricultural practices influenced subsidence rates and whether or not agricultural management is feasible on capped soils.

EMERGENCY RESPONSE SUBTEAM

The emergency response subteam is working on a recommended emergency response plan for CALFED. The subteam is reviewing existing plans, making recommendations for changes in those plans, and defining the responsibilities and duties of the reclamation districts and the role of CALFED and DWR in emergency response. Participants discussed the terms "emergency", "quick response", "disaster recovery", "threatening disaster", "alert conditions", and "catastrophic conditions". The subteam will more clearly define the terms used in its plan and distinguish roles between the local, State, and federal emergency response providers. The participants also discussed how the emergency response plan could ensure receipt of funds and the availability of equipment and trained operators under emergency conditions.

SEISMIC SUSCEPTIBILITY SUBTEAM

Research on the response of peat soils to seismic activity is ongoing. The team received preliminary results from lab tests describing the dynamic properties of peat soils from the University of California investigation; a technical presentation of those results will be made at the next subteam meeting (November 15). Participants discussed how the results of this research may be used to evaluate the susceptibility of levees throughout the Delta using data on the thickness of peat soils and the problems (i.e., imprecision) with existing data on peak thickness in the Delta. The seismic susceptibility subteam is also evaluating emergency preparedness for earthquake damage and multiple island failures; this effort will most likely be combined with the emergency response subteam work.

LEVEE-ASSOCIATED HABITAT SUBTEAM

The work of the levee-associated habitat subteam is dependent on CALFED's ecosystem restoration technical review team work and goals and targets for different habitats in the Delta. The subteam is looking for opportunities to link habitat restoration with flood control activities. When CALFED staff determines the goals and targets under the ecosystem restoration program, the subteam will evaluate constraints on habitat improvements and establish demonstration projects to evaluate the effectiveness of linking habitat projects with flood control.

DELTA IN-CHANNEL ISLANDS WORK GROUP

A work group was established by the San Francisco Estuary Project to consider alternatives for protecting and restoring in-channel islands in the Delta.. The work group is charged with integrating the San Francisco Estuary's efforts into CALFED, finalizing a framework for future planning in the Delta, identifying demonstration sites to develop guidelines for protecting and restoring in-channel islands, and seeking stakeholder concurrence on managing in-channel islands. In order to coordinate similar goals and objectives between the work group and CALFED, the work group is providing information to the CALFED levee and channel technical team.

IDENTIFICATION AND PRIORITIZATION OF ISLANDS FOR SPECIAL FUNDS

Funding for the levee program has two elements: baseline funding that treats all islands equally and funding for special projects. Islands that contain important attributes with high public benefit appropriate for special-projects funding are being identified. This identification process will not inhibit an island from applying for special funding but will rank islands as having high, medium, or low public-benefit value for consideration of special funding. The group identified the need to thoroughly document the purpose of the island identification and prioritization and the process for approving special funds (e.g., through the California Water Commission) and CALFED's role in funding projects.

CALFED staff presented a four-step process for the team to use in identifying and prioritizing islands:

1. Identify and adopt criteria.
2. Develop criteria information on each island ("information matrix").
3. Identify and adopt the objectives for prioritizing island attributes .
4. Rank each island's ability to meet each objective (as high, medium, or low).

CRITERIA

CALFED staff presented criteria for establishing island priorities. These criteria represent the attributes or resources that are protected by the levee system. The following list documents specific comments on the criteria and responses to those comments (*in italics*).

1. Include an island's ability to pay or meet cost-share requirements.

   The criteria represent attributes that are protected by the levee system or benefits of the levee system. An island's ability to pay is an issue of "need" and will be distinguished from a "benefit". An island's needs will be considered after the islands have been identified and

prioritized. The overall process of assessing special funding needs will be presented at a future meeting.

2. Translate all the criteria into economic terms (i.e., dollars) as a common base. See some of the recent U.S. Army Corps of Engineers' Mississippi River Flooding studies for examples.

Some benefits are not quantifiable (e.g., human life) and the assumptions used to translate all the benefits into economic terms are debatable. For purposes of this exercise, the attributes need not be described in dollars.

3. Include the effects on neighboring areas or the cumulative benefit of protecting an island. This can be characterized as surrounding miles of levees affected and acreage of adjacent lands protected. Seepage and wind erosion from increased fetch are of concern to neighboring islands.

Benefits to neighboring islands have been included in our list of criteria as acres of adjoining islands.

4. Include existing levee conditions on the criteria list.

As discussed above for cost-sharing, the existing levee condition represents "need" instead of "benefit"; therefore, it is not included on the criteria list.

5. Include island volume to represent the cost and response time for pumping and repair. Island volume affects water quality changes and erosion.

As discussed above for cost-sharing, the volume of an island (area times elevation) does not represent a "benefit"; therefore, volume, and related island size and elevation, are not included on the criteria list.

6. Include ratio of levee miles to levee size (e.g., acres protected per levee mile). This indicates the relative benefit per levee mile.

This criterium has been added.

7. The criteria adding levees on the North Fork Mokelumne is prejudicial. Would housing units or adjacent resources cover this benefit?

To be consistent with the focus on benefit rather than need, this criterium should be disregarded. However, it has been left on the matrix for the present simply to identify islands recommended for levee improvement under DWR's North Delta Program.

8. Clarify the benefit versus impact of levee work on habitats associated with levees. The criteria list should focus on the benefits of levee maintenance.

The levees would benefit those resources internal to the island, and natural resources on the external levee slopes would be most affected by levee work. Habitat on the external side of the levee system is not protected by the levees, and therefore, has been eliminated from the criteria list.

9. Identify the uniqueness of natural resources and special-status species protected by the levees.

   We have included a detailed list of the special-status species found on each island. The criterium, "natural resource areas with significant habitat value", also identifies areas determined unique or important by the California Department of Fish and Game (DFG).

10. Consolidate the criteria used to describe agricultural lands.

    We have eliminated two criteria, "irrigated agricultural lands" and "major crops" and kept "value of damageable crops" and "acres of agricultural lands". The value of damageable crops takes into consideration the crop types, and the acres of agricultural lands will include all irrigated lands.

OBJECTIVES

The islands can be ranked or prioritized by various objectives. Based on discussions at the meeting, the group identified the following objectives:

- water quality,
- agricultural production,
- ecosystems,
- life and property,
- recreation,
- resources of statewide concern (versus local or Delta-specific resources), and
- resources associated with adjacent islands.

OTHER COMMENTS

1. Coordinate levee funding with other CALFED programs, especially water conveyance alternatives and the ecosystem restoration program.

2. Distinguish between benefits internal to the Delta or source area from external considerations (e.g., water quality, adjacent/upstream resources). The "resources of statewide concern" objective is intended to satisfy this comment. CALFED staff have also recommended another objective, "resources of local or regional concern" to thoroughly address this comment.

3. A priority island application for special projects funding should consider:

- detrimental effects of island flooding, and
- beneficial features to add to the system.

ACTION ITEMS

- Participants will send Curt Schmutte their comments on the criteria list and the objectives by November 19, 1996.

- Staff will reorganize the criteria and matrix information per comments and talk to Frank Wernette (DFG) regarding ecosystem restoration objectives.

The next meeting of the levee and channel technical team will be December 10, 1996, 1:00 p.m. at 1416 Ninth Street, Room 1601.